432 AND ABOVE EME NEWS FEBRUARY 2008 VOL 36 #7

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CONDITIONS: 2008 ended on a real up beat with good conditions and excellent activity during the Dec 70 cm CW Activity Period (ATP). OZ4MM reports 26 QSOs during the ATP. Perigee, declination and noise are moving in sync once again to give a single outstanding activity weekend (AW). Thus the weekend of 22/23 Dec was also the focus of 23 cm activity. DL3OCH's EME dxpedition to Peru was dampened by equipment failures and other complications. Bodo did make it to the moon on 27 Dec and was able to provide some JT QSOs on 1296 - see his report later in this NL. The Jan AW will be on the 19th/20th with the 70 cm CW ATP on 19 Jan 2200 to 0000 and 20 Jan 1500 to 1700. This is also the weekend of the ARRL's Jan VHF Contest in which EME contacts count for points. Look for NA stations trying to increase their scores after about 1800 on 19/20 Jan. The exchange is only your 4 character grid square. Feb will be a very full month EME wise. There is the DUBUS Digital EME Contest on 9/10 Feb, the 1296 EME SSB Contest on 16/17 Feb (see the following rules) and the 70 cm CW ATP on 16 Feb 2200-0000 and 17 Feb 1400-1600. On top of all this there is a dxpedition to TI9K with 70 cm EME between 8-14 Feb and G3LTF is proposing 13 cm activity on 16/17 Feb – see below.

1296 EME SSB CONTEST RULES: This is intended to be *fun* event. You do not need to transmit on SSB to participate. CW to SSB and vice verse exchanges are encouraged and count for points. The contest starts on 16 Feb at 1100 and end on 17 Feb at 1200. Everyone one should have one common moon pass with operation moving from VK/Asia to Eur to NA and back to VK/Asia. Operation is on 23 cm only. Scoring is contact points times number of two letter Grid Sectors (IO, JM, FN, EM ...) worked. SSB to SSB contacts count as 2 points. SSB to CW (or CW to SSB) count as 1 point. The exchange is your Sector (IO, JM, etc.). Only the 2 sector letters need to be sent and copied. Operation may be by single or multiple operators from one location. No distinction for scoring will be made. Assisted operation is not encouraged. All skeds/operational arrangements should be made prior to the start of the contest. Logs should be sent to the "432 and Up EME NL" by email to a.katz@ieee.org ASAP. The top scoring station will receive an attractively framed certificate that will be presented at the next EME Conference.



PROPOSED MICROWAVE ACTIVITY DAYS: G3LTF suggests the following dates for microwave EME activity: 2.3 GHz 16/17 Feb [This is the 23 cm EME SSB Contest Weekend], 3.4 GHz 7/8 June, 5.7 GHz 5/6 July. Peter says these are days to just try to get on the moon and test equipment and make QSOs or just see if you can hear someone. If those who have gear can get on we'll have fun. (Peter is still building his 6 cm system, but hope to be QRV for the July weekend).

TI9K EME DXPEDITION: As part of an international dxpedition to the Isla del Coco (EJ65lm) there will be EME activity on 70 cm and 2 m. The rig on 70 cm will be a 27 el (DL8YHR's) yagi and 120 W. Activity on EME will be random only. TI9K will always call first. Operation will be on 432.100 using JT65b or CW as noted in the following listing of activity periods: 08 Feb 1340-1440 on CW, 09 Feb 1400-1600 on JT65b (DUBUS Digital Contest), 10 Feb 0000-0155 and 1450-1550 JT65b (DUBUS Digital Contest), 11 Feb 0100-0300 on JT65b, 12 Feb 1625-1725 on CW, and 14 Feb 0200-0530 and 1825-2025 on JT65b. The island is uninhabited with no facilities on the island. Everything has to be landed with jollyboats. The electricity will be produced with generators. For further info see http://www.ti9.eu.com/EME.htm. EME operators will be DH5FS (Fred) and K9CT (Craig).

DJ3JJ: Andreas' dj3jj@gmx.net 70 cm EME antenna is down and is changing his array from 4 x 13 wl DK7ZB (3 m) booms to 4 x 15 el (3.4 m) boom YU7EF yagis -- I am working in the very cold cellar on the new antennas. Simulations from YU7EF show a G/T improvement of 1.5 dB plus 0.5 dB better gain. I should end up with hopefully 20.8 dBd. Before I took the yagis down, I had a partial with I1NDP on SSB - he was very strong and did work HB9Q on SSB very easily. I hope to be QRV again soon.



DL2HWA's 4 x 37 el M² yagi array

<u>DL2HWA:</u> Dietmar <u>Firma-KCT@t-online.de</u> was QRV on 432 EME for the first time during the ARRL Contest – I have 4 x 37 el M² 13WLA yagis (fixed horiz), 300 W TRS PA (from Ericsson Compact 9000), preamp and IC-910. I worked OH2PO, DL9KR, DF3RU, OZ4MM, UA3PTW and VK3UM. I heard OE5JFL, KE2N, K1JT, KL6M, DL1YMK, DK3WG, JJ1NNJ, SV1BTR, I1NDP, VK4AFL, SM2CEW, JA5N, S53RM and more. I was very happy! I cannot be QRV every weekend as my shack is 30 m away from my home, but I should be QRV for contests and other events. I am working on a GS-35 PA for 6 dB more power on my side.

<u>F2TU:</u> Philippe <u>f2tu.philippe@orange.fr</u> was only QRV during Dec for a short time on random on 1296 -- On 21 Dec I worked G4RGK (549/559) and on 22 Dec G3LTF (579/579), SM5LE (539/569), PA3FXB (539/559) for initial #272 and IW2FZR (569/579).

G3TF: Peter g3ltf@btinternet.com participated in the 70 cm CW ATP on 22/23 Dec -- There was a pleasing amount of activity during both time slots. In the first signals were down here due to tree blockage and noise pick up from a local TV station (yes it is indeed radiated TX intermods and not RX overload). Pol was very much spread in the first period, but in the second it was sharper and Faraday was low. I worked OZ4MM, IINDP, JA9BOH, UA3PTW, SM4IVE,

SM3BYA, JA0TJU, and in the second period OK3RM, K1RQG, SM2CEW, SV1BTR, RW3PX, K2UYH, W8TXT, G4RGK, W7CI and WE2Y. Heard were UA6LGH, KE2N, N1KI, IK2RTI and DF3RU. In the first period, 1600-1615, on about 432.012-013 someone called me and I QRZed for 15 minutes, but just could not get the call. I believe it had a 5 and a D but the sending rate and the QSB combination were just too hard. On 24 Dec I ran a sked with N1KI on 432, but he only copied me one period, but did work S53RM. I was also on 1296 and worked on 22 Dec SM5LE, IK3COJ, GW3XYW, F2TU and IW2FZR, and on 23 Dec SM5LE, G4RGK and a nice SSB chat with G4CCH. I shan't be QRV in Jan, but will be around again in Feb.

G4RGK: Dave g4rgk@btinternet.com was active during Dec on 70 cm and worked WW2R, 11NDP, SM4IVE, K1RQG, RW3PX, OZ4MM, UA3PTW, SV1BTR, G3LTF, K2UYH, OK3RM, DF3RU, W7CI, KL6M and UA6LGH. Gottaways were DG1KJG and IK2RTI. I was only on 23 cm for a short time and worked F2TU and G3LTF.

HB9Q: Dan (HB9CRQ) dan@hb9q.ch has put together a QRP EME Photo Gallery of stations he has worked at www.hb9q.ch. Unfortunately there are many photos missing and Dan invites all QRP stations that he have worked to send him a photo of their antenna with a short description (band, number of elements or length in wl, power used for the QSO and year when the photo was taken). All the photos will be added to the Gallery and put on-line!

IINDP: Nando nando.pellegrini@tiscali.it was active during the Dec 70 cm CW ATP in the second window and found conditions rather good with slow changes in Faraday rotation and a significant number of stations on the air -- I worked the following: UA3PTW, OZ4MM, JA9BOH, G3LTF, JA0TJU, SM3BYA, SP7DCS, SM4IVE, UA6LGH, DF3RU, JA6AHB, K1RQG, W8TXT, WE2Y, G4RGK, RW3PX, SM2CEW, OK3RM and K2UYH.

I5YDI: Luigi patriota L@libero.it is looking for skeds on 70 cm. He operates both CW and JT. On CW he has about 500 W to his 4 x 25 el Jxx 8 wl yagis, but reduces his power 350 W on JT. On RX he is fighting with noise from a TV repeater, but is making QSOs. At the end of Dec he contaqcted K2UYH (O/O) on CW and -16 dB on JT.

IK5WJD: Alex ikcsg@tin.it is very pleased with 23 cm EME and writes -1296 is a great band! I have tried EME on 432 and 10 GHz, but now my new activity on 1296 has me very enthusiastic. The libration and smearing effect observed on 10 GHz are much reduced. These phenomena were recorded by Spectran software. On 3 cm with my 3 m dish echoes were always strong. My TWT produced about 50 W directly to the feed. Only on days with strong rain were the signals weak. My linear polarization angle did not seem very critical. I was able to QSO a station using vertical polarization with my feed horizontal. On 432 the polarization angle was much more critical and I would lose copy if the polarization was not aligned. On 70 cm I have fixed horizontal polarization with 4x26 el yagis. With 1 kW out my echoes are always readable. On 1296 I use my 3 m dish with a homebuilt SSPA that produces 250 W. I lose about $1.0 \sim$ 1.2 dB in the 1/2" Celleflex coax between the SSPA and the feed. The LNA has a 0.38 dB NF, but I never copy my echoes. The signals of stations on 1296 are very strong and many, many people are QRV. I use a Septum feed with a 3 ring Chaparral adjusted to the latest suggestions of W1GHZ (DUBUS magazine). Relative to 3 cm, I observe more constant signal amplitudes, and little fading or libration effects. The smearing effect appears to be negligible too.

<u>JA4BLC:</u> Yoshiro <u>ja4blc@web-sanin.co.jp</u> reports on VK-JA on 13cm EME – During the weekend of 15/16 Dec JA4BLC and JA8ERE worked VK3NX on 13 cm. These QSOs are very probably the first ever between Oceania and Asia on 13 cm EME. VK3NX transmitted on 2301.950 and the JAs on 2424.100.

JH1KRC: Mike jh1krc@syd.odn.ne.jp is trying to get his dish (4.4 m TVRO with 500 W+ at feed) to work properly with both 23 and 9 cm feeds in place—On 15 Dec I tested on 23 cm in EU window below 15 deg. My tracking indication was not correct and it took me 30 minutes to find the moon. Finally I had a good echo and called CQ several times but no reply. My 5 GHz feed is disturbing 23 cm radiation, so the echoes do not seem to be very strong.

KORZ: Bill wmccaa@comcast.net will be in hospital and does not expect to be very active on EME for the next couple of months. He did not make it on for the Dec 70 cm ATP. Bill reports he had one more multiplier in the ARRL EME Contest than reported last month. He ended with a score of 32x22.

KIRQG: Joe kIrqg@aol.com was active in Dec -- On 23 cm on 22 Dec I worked YL3AG for an initial, PA0BAT, GW3XYW, SM5LE, SM3LBN, K5JL and VE6TA. Did YL3AG have another callsign years ago? [I do not believe so he has been around for a number of years]. I was also on 432 for most of the ATP and had a great time. I heard many stations that I did not work. This was

my first time on ATP and I found continuous activity over the lower 25 kHz. Some of the stations worked were I1NDP, W9ZIH, W8TXT, SM4IVE, G4RGK, G3LTF, RW3PX, OZ4MM, UA3PTW, OK3RM, W7CI, K2UYH and SV1BTR. Heard with good signals were K3MF (CWNR), KE2N (CWNR), WE2Y, SM2CEW, DF3RU and others.

K2DH: Dave k2dh@frontiernet.net is temporarily QRT -- I had winds in excess of 70 mph 9 Jan and the elevation drive on my 5m solid dish broke sending the dish with a large crash to 90 degs elevation (it normally stows at 20 degs). I have not yet been able to fully evaluate any damage to the dish itself, the feed/feed support system, or the Azimuth drive. The Elevation drive will need to be completely rebuilt and that probably won't be possible until the spring. The dish is currently secured at 90 degrees, but I don't think I can leave it that way for the winter as the weight of snow filling it up may be too much for it. I will be back, but it looks like it will be a while before I become QRV again.

K5SO: Joe k5so@valornet.com was active in Dec on 1296 – I worked on 22/23 Dec between 2300 and 0100 6 stations. I completed with VE4SA on CW and then tried SSB but no go, VE3KRP with good signals, K5GW (599/599) – great to have back on, OZ6OL and others. Earlier in the month I heard nil looking for JH1KRC but did chat with VE6TA.

K6JEY: Doug dmillar@moonlink.net is still QRV on 432 CW, but writes that he is also experimenting with JT modes -- I am just about finished with a modest effort to add JT modes on 144, 432 and 1296. The reason is two fold. The level of interference on the lower bands has been steadily increasing making CW an almost pointless. The second is that I have too small a space to put up competitive antennas, especially on 1296. I will be running two long loop yagis and 300 W on 23 cm and should be able to make some CW contacts, but expect to be mostly be on JT. The key to the JT project has been a Microham Microkeyer. It allows me to use one computer and interface with a variety of radios by having cables already set for each radio. I am using an FT 847 for the lower bands and a TS790A for 1296; all with external amplifiers. I should be tested and ready for the upcoming digital contest. I would be interested in hearing what others are planning and doing. I am also interested in how people are using MAP65.

LA5ZK: Helge [send e-mail to LA8AV skudsvik@bluezone.no] is 70 years old, but new on 23 cm EME. He is a retired aircraft mechanic engineer and has used his mechanical know how to build up his EME station. He machined all the mechanical parts except for the dish, which is the dish used by LA8LF before he built up his present 5.3 m dish. Helge's dish is 3.7 m. He also has a 170 W SSPA mounted on the backside of the dish. It connects to the feed through only 3 m of ½" Cellflex. His preamp is a DB6NT design with a 0.3 dB NF, which is used with DB6NT xverter and ICOM IC-756 PRO II.



LA5ZK's 3.7 m dish for 1296 with PA mounted at the rear

NOOY: Pete petesias@yahoo.com had major ice storm damage... Trees, power lines, antennas, etc. are down from more than 2" of ice in some cases. It appears that his big dish is ok, but we will have to wait for the full report. Before the storm during the Dec AW he did hear VE4SA and WB2BYP, and worked about 5 or 6 stations including DF3RU.

OA/DL3OCH: Bodo dl3och@gmx.de reports that he had unexpected problems that limited his EME activity. He was able to QRV on 23 cm from the Lima area on 27 Dec using the call OA4BHY. He used his 59 el yagi but had less power this time, only about 65 W out of his transverter because of battery limitations. Despite the low power and short notice he worked HB9Q, DJ9YW, G4CCH,

PA3CSG, OK1DFC and K2UYH. Jorge (OA4BHY) was really impressed how fine EME works. Plans for additional EME from OC6I (different grid) did not workout due to transportation problems. There were also equipment problems on 2 m and only one QSO was made on this band. Bodo was going to try on 1296 from the Lima area a second time before he left, but again Murphy appeared. For the first time in all his travels his transverter stopped working and so no additional 23 cm OSOs were made.

OZ4MM: Stig vestergaard@os.dk writes -- The Dec EME CW ATP on 432 was an early Christmas gift. During the first hours in moonrise and after midnight, I worked 26 stations on 432MHz CW. Conditions were found to be OK to good here, and weather also showed its good side. The following stations were worked: SM4IVE, JA0TJU, IINDP, SM3BYA, G3LTF, DG1KJG #296 (6 Yagi/200w), OK3RM, IK2RTI #297, SP7DCS, IK6EIW, JA9BOH, UA3PTW, WE2Y, K1RQG, G4RGK, KE2N, SV1BTR, K3MF, W8TXT, W7MEM #298, K2UYH, RW3PX, N1KI #299 (2 yagi/800w), KL7HFQ, W7CI and DF3RU. Due to the good activity, I decided not to switch to 1296 that night.

SM4IVE: Lars sm4ive@telia.com was active on 70 cm with relative QRP in Dec, but is working on a big dish -- I was active on 432 EME after a long absence and found condx to be quite ok. I'm having some RX problems. It could be that my old preamps are not so good anymore considering they were built in 1991 or so. I got fine reports so the amp is working ok. I worked these stations during the Dec 70 cm ATP UA3PTW, OZ4MM, G3LTF, I1NDP for initial #496, K1RQG, G4RGK, SM2CEW, SV1BTR and RW3PX #497. Heard were SM3BYA, SP7DCS and some more that were to weak to identify. The station is 4 x 22 el yagis, MGF 1302 with TS2000, TH347 - the old amp built in 1990 is still working. It has not been in use for at least 2 years. Construction of a new dish is underway. It will be the same size as the old one (13 m).

SP7DCS: Chris sp7dcs@o2.pl was QRV in the Dec 70 cm ATP for the first time -- I was on for 1.5 hours on my moon rise and worked 2 stations on CW. Many TNX to I1NDP for a lot of patience with my QRP signal and initial #11. I QSO'd on 22 Dec at 1525 OZ4MM (559/429) and 1545 I1NDP (O/O). Heard were UA3PTW, G3LTF, SM3BYA and SM4IVE. This was with my 4 x 25 el yagis with no elevation and 250 W in the shack. Unfortunately later Mr. Murphy visited my shack and the power supply controlling my preamp on all bands went dead. So, I am temporarily QRT, but hope to repair it soon. I checked 23 cm before my moonset, but did not hear anyone. I have added some recordings from my 70 and 23 cm operation in ARRL contest to my webpage http://sp7dcs.webpark.pl.

SV1BTR: Jimmy jimmyv@hol.gr is now QRV on 1296 -- What a great weekend! I heard at the end of Dec my first 23 cm echoes with my 3.6 m dish and 50 W at the feed. The next day despite continuing DEM transverter problems on TX and RX as well as a big voltage drop at the preamp and T/R relay, I worked my first 23 cm CW EME QSOs. My output from the transverter was changing > 6-7 dB on both RX and TX. Nevertheless I aligned the feed and choke with Sun noise and heard someone calling me. And then in 80 minutes with a lot of echo testing in between and problems throughout, I worked JA4BLC (559/549), DL4MEA (549/559), G4CCH (549/569), HB9BBD (589/579) - what a signal!, G3LTF (559/569), LA9NEA (549/559) and IW2FZR (429/519). I Could not stay longer as my power had dropped so low that Bird was hardly moving. A big thanks for the QSOs. 2007 is coming to its end and I had great fun participating in DUBUS ATP in Dec. I want to take this opportunity to thank DUBUS for sponsoring these fine EME monthly events in the last 2 years and for the future to come. It was really nice and meaningful to meet many friends and exchange Christmas and New Year wishes during our QSOs. On 70 cm I was QRV only in 2nd session for 2 hrs. I worked 10 on random SM4IVE, G3LTF, SM2CEW, UA3PTW, OZ4MM, G4RGK, DG1KJG, SM3BYA, K1RQG, W7CI and CWNR K2UYH. I also worked OK3RM earlier.

<u>VE3KRP:</u> Eddie <u>eddie@tbaytel.net</u> was active in Dec and reports hearing K1RQG, K5JL, VE6TA, PA0BAT, SM3LBN, VE6TA and LA9NEA on 1296. During the AW on 22/23 Dec he worked K5SO and heard bits and pieces from VE4SA. At beginning of Jan Eddie worked K5GW for initial #31.

<u>VE4SA:</u> Shawn <u>ve4sa@rac.ca</u> in Dec added contacts on CW on 1296 with G4CCH, HB9Q, K5SO, K5GW and K2UYH and is now up to initial #8. Shawn needs about 30 degs at his QTH to have a clear shot at the moon. He is using a 3 m dish and single 7289 PA with about 100 W at the feed. Shawn plans to add 13 cm EME in the spring.

VK2DAG: Matt vk2dag@bigpond.com writes about his 432 activity -- I am not really QRV on 7 0cm. I have a 26 el yagi and 110 W. I worked HB9Q and DL7APV during the Nov part of the ARRL Contest. My window to my east is thru a forest of trees and limited to a high moon elevation. My window to the west is down to the horizon. I will be putting a tower in sometime in 2008,

which will improve my west window. I plan to be Dayton in May and am hoping to meet other EMEers there.

VK3UM: Doug tikaluna@bigpond.com at the end of Dec spent time measuring Sun Noise -- The Sun is close to the Galactic Center. With my Moon Planner program calibrating for quiet sky was not all that easy. I used the approximate background position of the Moon as the best compromise. Drifting high or low off the Sun was not an option as you were going up and down the plane. I had to go a fair way CCW to get a reasonable cold sky calibration point. Boy that Milky Way is 'bumpy'. Results were interesting and very close to expected with an abnormality on 23 that can be explained. On 29 Dec at 0000-0100 (IFlux SFU IPS 69) on 70 cm measured 18.5 dB and calculated 15.9 dB (diff 2.6 dB with beam width of 5.7 degrees); on 23 cm measured 19.2 dB and calculated 19.8 dB (dif -0.6 dB with beam width of 1.9 degrees). Ground temperature at time was 39 C although pre-amp (termination) was probably in the high 40's. (Good reason to do measurements as the EME Shack has the only A/C!!). C/S to termination Measured 6.3 dB and calculated 7.8 dB (diff -1.5dB at 8K sky). The conclusions are that 70 cm is well in the ball park, and on 23 the dish efficiency appears to be ~1.5 dB on the low side given the dual feed and under illumination. Also given the narrower beam width on 23 cm additional back ground noise was not noticeable, but could be extrapolated to being in the vicinity of 0.9 dB (19.2+1.5-19.8). I would be interested to see what others measure.

W6BY: Brian w6by@rcn.com writes that his 1296 operation during the Nov ARRL contest weekend is referred to as "Jamesburg Jr." becaue the 8' dish EME station is kind of a group effort of the JamesBurg team -- I have the dish and mount, AD6IW has the PA and transverter, and N9JIM has the feed. Access to the "big dish" in Jamesburg has been limited for the time being, but we should be on again in the future using Jamesburg Jr.

W6IFE: Doug (K6JEY) dmillar@moonlink.net reports on happens at the big OVRO dish -- We took a group of teachers, students and astronomers up to the Observatory for a science day and tour of the dish. We had about 40 people and all had a good time. Unfortunately we are still not able to get back on the moon using the dish. Our equipment package is on standby at WA6EXV in case we get an opportunity. A second package is being built by him, which will have more bands, power, etc.

WB2BYP: John wb2byp@ieee.org was active on 1296 during the 22/23 Dec AW. The first night he worked K5JL, but had problems with elevation drive. Later he QSO'd K2UYH, DF3RU and NOOY.

K2UYH: I <u>a.katz@ieee.org</u> had a little more time on the moon than usual over the holidays. Noise is still a huge problem on 432. I can move my antenna and see the noise change by more than an S-unit! This is white noise not birdies. Sometimes I feel I should just give up on 70 cm altogether. It is very frustrating. I worked during the 70 cm CW ATP on 22 Dec at 2350 W8TXT (559/559), on 23 Dec at 0000 G3LTF (559/569), 0018 RW3PX (559/559), 0027 I1NDP (559/559), 0031 OZ4MM (569/579), 0041 K1RQG (569/569), 0052 OK3RM (559/569) for CW initial #700, 0058 G4RGK (569/549) and 0135 WE2Y QRZ figured out the call too late. I then switched to 1296 to QSO at 0221 DF3RU (559/559) and 0230 WB2BYP (559/539). During the week I added on 26 Dec on 432 at 0502 I5YDI (18DB/O) on JT65c for #741* and on CW #701 and 0600 OE5MPL (16DB/O) on JT65c and a partial on CW (-/O) as we had a sequencing misunderstanding and did not complete. I also worked on 432 on 27 Dec at 0330 ZS6OB (O/26DB) on JT65b *742. (Peter is using only an Icom 910H with no preamp and 4 x 22 el yagis). The big excitement was on 1296. I switch there to QSO at 0428 OK1KIR (559/559), 0616 VE4SA (559/559) for initial #276 on CW and #311* mixed mode, 0630 IK5JWD (549/539) #277 on CW and #312* mixed, and 0720 OA4BHR (24/22DB) JT65c for #313* and DXCC 61*. Bodo's showing up from Chile as OA4BHY was a surprise. I was on for sked and only learned about it when checking the ON4KST reflector. (I still do not have the Internet connected in my shack, but can check it from my home office). We easily worked on random. There were no skeds. I did not even know the call in advance. On 29 Dec on 1296 I added at 0555 K9SLQ (589/569) and 0606 LA9NEA (569/579). Unfortunately I will not be active during the Jan AW because of business travel.

NETNEWS BY G4RGK: RW3PX on 432 CW and added initials with SM4IVE and OK3RM. DK3WG on 432 using JT65b worked K7XQ and F6APE for initial #433*. K5PJR should be active again in Jan on 1296 EME with his new 16' Scientific Atlanta dish and is looking forward to multiple band operation. DL9KR was not active during the Dec 70 cm ATP/AW due to being iced up. W9IIX is QRV again on 1296 and is working on a big PA using a GS-23B. WB0GGM has most of his 70 cm EME system working and will back on the moon soon. WA9KRT is QRV for EME on the horizon only and looking for skeds. DL1YMK getting set up for 9 cm EME – received 170 W 9 cm PA for Christmas. WB7QBS' EME array is looking good. PA3CSG at end of Dec/Jan

worked 9H1TX on 70 cm and OA4BHY on 23 cm using JT65c for new countries. WD5AGO had ice storm damage to the vertical shaft on his dish, but says it is useable. $\underline{VE1ALQ}$ reports that not much has changed since last month. WX has not allowed him to get up to his dish to make needed TR relay repairs. WA4NJP is making progress on getting back on 23 and 70 cm EME. KL7HFQ had a partial with W8TXT on 432 in Dec and will be QRV on during the Jan ATP. K9SLO was QRV on 23 cm in Dec and worked LA9NEA and K2UYH plus others. K5JL was on the moon on 23 cm on 22 Dec. W8TXT worked in Dec on 70 cm KE2N, WE2Y, W7CI and possibly others, and thinks he heard KL7HFQ. Mike's system is working fine. **LX1DB** is retiring in Jan. He QSO'd on 13 cm in Dec VK3NX on CW and SSB. Willie is working on septum 9 cm feed, which he wants to compare with his W2IMU feed. Also, he is set up for 24 GHz EME. W7MEM was active on 70 cm during the Dec AW/ATP and worked OZ4MM. Mark heard G3LTF and W8TXT (CWNR). W7CI was active on 70 cm during the Dec ATP/AW and made 2 initials with SV1BTR and W8TXT. VE4MA and W5LUA are getting ready to resume 24 GHz EME activity. F5TTU (F6KHM group) is working on a 600 W SSPA for 1296. He is also working on a 13 cm system. W4OP plans to listen on 23 cm EME the next AW. N8CQ may QRV on 432 EME during the Jan AW. KL6M should be active on 70 and possibly 13 cm during the Jan AW.

FOR SALE: W7MEM has 4 M29WL 432 yagis for sale with vertical support, phasing lines and power divider. Mark is looking for a cable assembly for a FT-736R module and a 1296 feed. WW2R is looking for TWT power supply for RW90. JH1KRC is looking for info on Eimac Y-834 and/or Y-730 for use on 1296. Mike has a source of tube sockets; contact him for details. KO7N has for sale a 1296 feed horn built by VE1ALQ and a dual stage LNA by W7CNK with 0.20 dB NF and 35 dB gain. Not used in absolutely new condx. \$US150 + freight for feed and asking \$US200 for LNA. Contact Dick at 541.912.7762 or 541.935.0548. VE3KRP is looking for 13 cm feed. KL6M also has a 23 cm LNA for sale.

POWER SPIKES BY K1FO: I've looked at virtually every JA VHF - UHF multi-mode radio, Icom, Yaesu, Kenwood. They ALL power spike. Usually Icom has the worst spikes. The IC-471H I use for testing 432 amps puts out a 90 W spike. I used to have a FT-847 and it spiked too. The spikes are long enough to be seen on peak reading power meters like the one in the Lunar-Link amps, the Array Solutions Power Master and the LNA Tech peak board for Birds. My solution for Lunar-Link customers with spiking problems is to run the transceiver near full power and use an attenuator in the input to the amp (a long roll of RG-58 works) to reduce the power level.

MORE ON TS2000X DRIFT BY DF4UE df4ue@arcor.de [forward PA3FXB]: I solved the TS2000 drift problem by 1) running the fan permanently and 2) shielding the TCXO with some foam from the airflow of the fan.



IQ4DF's dish used on 1296 EME

FLORENCE 2008: Past EME Conferences all have been truly wonderful. I am sure Florence will not be an exception. Italy is one of my favorite countries to visit. The pre and post conference tours planned around the conference seem to be exceptional – see http://www.ari-crt.it/eme2008/questionnaire.htm. I have not missed a conference since the first one I attended in 1990 even though when I was younger it was difficult to justify international travel even once ever 2 years.

There have to be EMEers in the same position today. This is one of the reasons I have not favored having a conference every year. Gossip is terrible and it would be awful if gossip ruined our EME Conferences. I have seen some comments about the 2008 EME Conference that seem to fall in this category. Our "modern" EME conference was really the brain child of Geert, PA3CSG and goes back to 1988. I have listed the past conferences locations and dates below:

1^{st}	York City	USA	1966
2nd	Paramus, NJ	USA	1968
3^{rd}	Thorn,	Netherlands	1988
4th	Trenton, NJ	USA	1990
5th	Thorn	Netherlands	1992
6th	Gotenburg	Sweden	1994
7th	Bowie, MD	USA	1996
8th	Paris	France	1998
9th	Rio de Janeiro	Brazil	2000
10th	Prague	Czech	2002
11th	Trenton, NJ	USA	2004
12th	Wuerzburg	Germany	2006

The first two were run by the East Coast VHF Society and were part of a larger VHF conference in which they tried to add an international flavor by bringing in some of the early EMEers. I was at the 68 conference and have a picture of the EMEers that were there. The big attraction was VK3ATN. Peter, G3LTF was among the first successful EMEers and can probably comment better on these early events. Our group's, the 432 and UP gang, conference really started with Thorn in '88. It was primarily 432 as 1296 activity was much lower then (and the terms 70 cm and 23 cm were not in wide use - hi). 2 m EMEers were always welcome, but the focus of the conference was never in question. In fact, the 2 m group ran their own conferences a number of times - HB9Q was one of the organizers. The decision on who would host the next conference has always been decided at an open meeting at the end of the previous conference. Although not in writing, (we are a true anarchy), it has been understood that the group chosen to host the next conference is agreeing to continue the conference's traditions - focus on 432 and up EME. Every indication is that the Italian group hosting this year's conference will do the same. (The conference is dedicated to 432 EME I5TDJ).

Regarding the digital controversy, this is more recent and more disturbing. It was not an issue before Prague in 2002. I may be out of phase with the majority, but I am in favor of anything that increases EME activity and does not decrease CW operation. The conference's history is CW. There was nothing else in the beginning. Should we exclude digital (JT) operators because of this? 70 cm (and 23 cm) have a different history and activity patterns than 2 m. What has happen on 2 m is unfortunate. But on 432 and 1296 there is no question that the dominant EME mode is CW. I do not see this changing. The added challenge of CW QSOs is accepted and something that most stations are trying to achieve. I feel on 432 and 1296, JT brings in new CW EMEers we would not have without it. We do not want to discourage this new source of CW EME operators. Creating a wall making those starting out on JT feel unwanted is not what we want to do. We want to educate them and make them part of our group.

FINAL: Talk about EME at HF -- There is an interesting report on 40 m Moonbounce on 7.4075 MHz - see http://news.yahoo.com/s/space/20080108/sc-space/lowestradarechodetectedfrommoon.

There is a useful list of EME related URLs posted in K1RQG's 23 Dec Netnotes that may be of interest.

This was definitely not an amateur effort. The 2008 Southeastern VHF Society Conference will be 25/26 April in Orlando, FL and will be sponsored by the Florida Weak Signal Society and invites EMEers to attend. See www.flwss.net for details.

That covers the news for this month. Please keep the reports and tech info coming. I will not be QRV during the ATP/AW on 19/20 Jan because of travel, but will be looking for you at other times off the moon. 73, Al – K2UYH



G3LTF's new super 1296 EME feed